

Keeping Yukon Natural

Recommendations for Operators, Site Managers and Resource Developers



In Yukon, perennial sowthistle has rapidly been expanding along highway corridors and other disturbed areas.
Photo: Andrea Altherr

What's the problem?

Invasive species are non-native species that have the potential to cause undesirable or detrimental impacts on people, animals, or the ecosystem. These species often reproduce quickly and are very persistent. Most non-native species introduced into the Yukon will not become invasive due to their inability to adapt to the cold climate and nutrient poor soils. However, invasive species that do become established often excel in these conditions due to their ability to outcompete boreal species. Changing climatic conditions in the North such as warmer winters and wetter summers may further increase the extent and rate of spread of invasive species.

Disturbances created through mining, exploration, construction, and forestry practices create environments for invasive species to thrive. Often these activities involve removal of top soil and native

vegetation. Equipment used during mineral and forestry operations can be carriers of invasive species. When contaminated equipment arrives on site, seeds can fall to the newly exposed soil and have the opportunity to become established. Natural boreal vegetation is often slow to grow back in these exposed areas due to climatic conditions and poor soil nutrient regimes. In the absence of native plants, invasive species will move into a site and form monocultures. Once invasive species are established on site they are extremely difficult to remove which can increase the cost of reclamation and closure activities.

Best practices for operators, site manager and resource developers

As a site manager or equipment operator, pre-planning and mitigation are essential to stopping invasive species from being

established on site. A major objective for all site activities should be to avoid the introduction and spread of invasive species. Prevention is the most cost-effective method of invasive species management. This includes:

- ensure all equipment that comes onto site is clean;
- clean equipment before operating in new areas;
 - Inspect tires, tracks, wheel wells and blades for plant parts and seeds
 - Apply same requirements to contractors carrying out clearing or brushing activities
- avoid unnecessary new disturbances and soil compaction;
- source fill or aggregates from borrow pits that are not contaminated with invasive species;
- replant large bare areas and cleared slopes as soon as possible;
 - Use native seed for all revegetation activities. Chosen species should reflect the site-specific conditions
- order certified invasive free seed (Canada No. 1). YISC can provide operators with a list of invasive species; and
- learn to recognize invasive species and report infestations.

Ensure all equipment that comes onto site is clean.

Seeds can stay viable for a long time, check your source of gravel and fill for presence of invasive species. Photo: Greg Brunner



Two examples of high-risk invasive species to be aware of on your site

Perennial sowthistle

Sonchus arvensis

Perennial sowthistle is a tall (1.5 metre) plant with small, dandelion-like flowers that grow in clusters. It has a deep root system that makes removal by hand extremely difficult. Thousands of light fluffy seeds can be produced by one plant, allowing perennial sowthistle to easily colonize new areas. Perennial sowthistle can severely reduce yields of agricultural crops and inhibits germination of native vegetation, reducing forage sources for Yukon wildlife. Spread of perennial sowthistle can be reduced by ensuring maintenance and excavating equipment is thoroughly cleaned before moving sites and avoiding mowing of areas when seeds are mature.

New stands of tufted bird vetch should be removed immediately as the plant will spread and take over new areas very quickly.
Photo: Andrea Altherr



Tufted bird vetch

Vicia cracca

Tufted bird vetch is a long climbing or trailing vine-like pea plant.

The leaves have charismatic tendrils and deep purple-to-blue flowers that form a seed pod when mature. Tufted bird vetch is extremely aggressive, readily taking over in natural and disturbed areas by climbing atop and shading out native vegetation. It can reproduce through root fragments and can be transported in trimming machinery and other large equipment. Repeated low trimming in early spring, hand pulling, and herbicide application before the plants reach flowering stage are effective treatment methods.

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Report invasive species to info@yukoninvasives.com OR
use the reporting form at www.yukoninvasive.com OR
submit your observation to www.iNaturalist.org

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